

What is claimed is:

1. A method for the enhanced production of bacterial toxins comprising cultivating a toxin producing bacteria wherein toxin expression inhibitors formed by said toxin producing bacteria are eliminated or reduced.
2. The method according to claim 1 wherein said toxin-producing bacteria is selected from the genus consisting of Bordetella, Clostridium, Staphylococcus, Salmonella, Shigella, Vibrio and Escherichia.
3. The method according to claim 2 wherein said toxin producing bacteria is Bordetella pertussis or Bordetella bronchiseptica.
4. The method according to claim 1 or 3 wherein said toxin is pertussis toxin (PT) or pertactin.
5. The method according to claim 1 wherein said toxin expression inhibitor is sulfate ion.
6. The method according to claim 5 wherein said sulfate ion is eliminated or reduced from within a bacterial cell or culture media using a method selected from the group consisting of;
 - a) adding a composition to said bacterial culture media that forms a substantially insoluble complex with said sulfate ion;
 - b) providing said bacterial culture medium that is deficient, or has a reduced concentration of sulfate ion metabolic precursors; and
 - c) providing a cysteine desulfinate knockout mutant bacteria.

7. The method according to claim 6, wherein said composition is a soluble metal salt.
8. The method according to claim 7, wherein said soluble metal salt is BaCl₂ or BaBr₂.
9. The method according to claim 8, wherein said soluble metal salt is a soluble salt of Pb(II), Sr(II) or Ag(II).
10. The method according to claim 6 wherein said sulfate ion metabolic precursor is cysteine.
11. The method according to claim 6 where in said bacterial culture medium that is deficient, or has a reduced concentration of sulfate ion metabolic precursors further comprises a soluble metal salt that forms a substantially insoluble complex with said sulfate ion
12. The method according to claim 6 wherein in said cysteine desulfinate knockout mutant bacteria is a recombinant *Bordetella pertussis* or *Bordetella bronchiseptica*.
13. A method of cultivating *B. pertussis*, comprising cultivating *B. pertussis* in the presence of an effective amount of one or more soluble metal salts that form a substantially insoluble complex with sulfate.
14. The method of claim 13, wherein the soluble metal salt is a Ba(II) halide.
15. The method of claim 13, wherein the soluble metal salt is BaCl₂ or BaBr₂.

16. The method of claim 13, wherein the soluble metal salt is a soluble salt of Pb(II), Sr(II) or Ag(II).
17. A method of making a culture medium that supports *B. pertussis* growth and prevents or decreases inhibition of PT expression by sulfate, comprising admixing a *B. pertussis* culture medium with an effective amount of one or more soluble metal salts that form a substantially insoluble complex with sulfate.
18. The method of claim 17, wherein the soluble metal salt is a Ba(II) halide.
19. The method of claim 17, wherein the soluble metal salt is BaCl₂ or BaBr₂.
20. The method of claim 17, wherein the soluble metal salt is a soluble salt of Pb(II), Sr(II) or Ag(II).
21. A culture medium that supports the growth of *B. pertussis* comprising an amount of one or more soluble metal salts that form a substantially insoluble complex with sulfate, wherein said amount prevents or reduces the inhibition of PT expression by sulfate.
22. The culture medium of claim 21, wherein the soluble metal salt is a Ba(II) halide.
23. The culture medium of claim 21, wherein the soluble metal salt is BaCl₂ or BaBr₂.
24. The culture medium of claim 21, wherein the soluble metal salt is a soluble salt of Pb(II), Sr(II) or Ag(II).

25. A method of producing PT comprising growing *B. pertussis* in a *B. pertussis* culture medium comprising an effective amount of a soluble metal salt that forms a substantially insoluble complex with sulfate, and isolating the PT from the culture medium.
26. The method of claim 25 , wherein the soluble metal salt is a Ba(II) halide.
27. The method of claim 25, wherein the soluble metal salt is BaCl₂ or BaBr₂.
28. The method of claim 25, wherein the soluble metal salt is a soluble salt of Pb(II), Sr(II) or Ag(II).